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ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/764,420	LUM ET AL.	
	Examiner	Art Unit	
	RUSSELL S. NEGIN	1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32 and 68-70* is/are pending in the application.

4a) Of the above claim(s) *5-7,10 and 11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,8,9,12-33 and 68-70* is/are rejected.

7)☒ Claim(s) *68* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Comments

Applicants' request for reconsideration in the communication filed on 7 February 2008 is acknowledged and the amendments are entered.

Claim 5-7 and 10-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 26 May 2006.

Claims 1-33 and 68-70 are pending, and claims 1-4, 8-9, 12-33 and 68-70 are examined in the instant Office action.

Claim Objections

Claim 68 is objected to because of the following informalities:

Line 13 of claim 68 has the phrase "yield a agonist activity" which should read "yield an agonist activity."

Appropriate correction is required.

Withdrawn Rejections

The rejections of claims 1-4, 8-9, 12-32 and 68-70 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention are withdrawn in view of the amendments to the instant set of claims filed on 7 February 2008.

The rejections of claims 1-4, 8-9, and 12-32 under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter are withdrawn in view of the amendments to the instant set of claims on 7 February 2008.

The rejections of claims 1-4, 12-16, 18-26, 28, and 30-32 under 35 U.S.C. 102(b) as being anticipated by Castle et al. [WO 02/059560 A2] are withdrawn in view of amendments filed to the set of claims in 7 February 2008.

The rejections of claims 8, 9, 17, 27, 29, and 68-70 under 35 U.S.C. 103(a) as being unpatentable over Castle et al. as applied to claims 1-4, 12-16, 18-26, 28, and 30-32 above in further view of Mukherjee et al. [Molecular Endocrinology, 2000, volume 14, pages 1425-1433] are withdrawn in view of arguments filed by applicant on pages 17-21 of the Remarks filed on 7 February 2008.

Claim Rejections - 35 USC § 112

The following rejection is newly applied:

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Since Table 12 of the instant specification comprises many more sequences than those listed in parentheses, the question arises as to which probes/sequences applicant

intends the population to consist of: all of the sequences in Table 12, or those listed in instant claim 33.

Claim Rejections - 35 USC § 101

The rejection of claim 33 under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter is withdrawn due to amendments made on 17 May 2007.

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The following rejection is reiterated from the previous Office action:

Claims 68-70 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The following analysis of facts of this particular patent application follows the analysis suggested in the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility". Note that the text of the Guidelines is italicized.

To satisfy section 101 requirements, the claim must be for a practical application of the § 101 judicial exception, which can be identified in various ways (Guidelines, p. 19):

- The claimed invention "transforms" an article or physical object to a different state or thing.
- The claimed invention otherwise produces a useful, concrete and tangible result.

In the instant case, the claimed invention does not "transform" an article or physical object to a different state or thing because the instant set of claims of determining whether an agent possesses a biological activity does not result in a physical transformation. This does not preclude the subject matter to be patentable as, for eligibility analysis, as

> *physical transformation "is not an invariable requirement, but merely one example of how a mathematical algorithm [or law of nature] may bring about a useful application." AT&T, 172 F.3d at 1358-59, 50 USPQ2d at 1452. If the examiner determines that the claim does not entail the transformation of an article, then the examiner shall review the claim to determine if the claim provides a practical application that produces a useful, tangible and concrete result. In determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete." The claim must be examined to see if it includes anything more than a § 101 judicial exception. If the claim is directed to a practical application of the § 101 judicial exception producing a result tied to the physical world that does not preempt the judicial exception, then the claim meets the statutory requirement of 35 U.S.C. § 101. If the examiner does not find such a practical application, the examiner has determined that the claim is nonstatutory. (Guidelines, p. 20)*

The question is thus whether the final result achieved by the claimed invention satisfies all three criteria of being useful, and concrete, and tangible.

Furthermore, the useful, tangible, and concrete result must be recited in the claim itself, rather than addressed in specification.

The instant claims are drawn to computational means for determining whether an agent possesses a biological activity. However, as claimed, the method does not produce a tangible result. For example, the method as claimed may take place entirely within the confines of a computer or a human mind without any communication to the outside world and without using or making available for use, the results of the

computation. Thus, the instant methods of the claims do not produce any tangible result.

Response to Arguments

Applicant's arguments filed 7 February 2008 have been fully considered but they are not persuasive.

While applicant's amendments overcame the 35 U.S.C. 101 Rejection on claims 1-4, 8, 9, and 12-32, no amendments or arguments were presented to address the 35 U.S.C. 101 Rejection on instant claims 68-70. Consequently, the 35 U.S.C. 101 Rejection on claims 68-70 is reiterated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

35 U.S.C. 103 Rejection #1:

The following rejection is newly applied:

Claims 1-4, 8, 9, 12-16, 18-27, 28-29, 30-32, and 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castle et al. [WO 02/059560 A2; issued 1 August 2002; filed 23 January 2002] in view of Smith [US Patent 6,294,559; issued 25 September 2001; filed 2 August 1998].

Claim 1 is drawn to a method for determining the magnitude of a measurable response elicited by an agent in living cells, the method comprising the steps of:

-obtaining the expression measurement of at least one gene population or at least one protein population in living cells contacted with an agent and generating at least one of an efficacy value of the agent, a toxicity value of the agent or a classifier value of the agent,

- making at least one comparison selected from the group consisting of:

1) comparison of efficacy values with reference values

2) comparison of toxicity values with reference values

3) comparison of classifier values with reference values

- using the comparison results obtained in the previous step to determine whether the agent possesses the defined biological activity and determine the degree of the defined biological activity

- presenting the magnitude of the response obtained to a user.

Claim 2 is drawn to the same subject matter as claim 1, except two comparisons are made from the list of three.

Claim 3 is drawn to the same subject matter as claim 1, except all three comparisons are made from the list of three.

Claim 4 is further limiting with the extra limitation that the agent is a chemical agent.

Claim 12 is further limiting with the extra limitation of the at least one reference classifier value is the classifier value of a reference agent that possesses the defined biological activity.

The document of Castle et al., studies a method and system for predicting the biological activity, including toxicology and toxicity, of substances, and states in the abstract:

> A method for assessing toxicity and toxicology of a substance is disclosed comprising: exposing a set of at least two genes to the substance; monitoring the response of each gene in the set of genes to the substances; analyzing the variance of the response to the substance for each gene using contrast analysis; constructing a summary score for each gene in the set of genes; performing a logistic regression analysis upon the summary scores; and using the results of the logistic regression analysis to provide a predictive model regarding the toxicity and toxicology of the substance.

The algorithm of interest is elaborated on pages 32-33 of Castle et al., which states:

> The following is a model developed from gene expression of rat livers using Affymetrix RU35 Rat Chip data. The rats were either treated with a toxic dose, non-toxic dose or vehicle controls. The raw expression data expressed as normalized average differences were then entered into the model described here.
>
> In achieving this analysis, a preferred expression similarity profiling for predictive toxicology algorithm is employed. In this algorithm, let Xij represent gene expression values for the i'th gene and j'th sample (I = 1 to I, j = 1 to J). Let Yj, Dj, and Tj represent the indicator of toxicity for the j'th sample, the dose for the j'th sample, and the time for the j'th sample,

> respectively. In the first step, time stable and dose dependent patterns are selected. For gene i,fit a two-factor analysis of variance model. This model can be expressed as
> Xij = a+b*Dj+c*Tj+d*Dj*Tj
> for the case of two dose groups (Dj = 0 or 1) and two time points (Tj = 0 or 1). In this model, the parameters (a, b, c, d) are estimated via a least squares algorithm.
> Accomodating additional time/dose levels is accomplished by adding additional model parameters for each additional time and/or dose level. For example, the case of four time points (Tj = 0 or 1 or 2 or 3) and three dose groups (Dj = 0 or 1 or 2 can be expressed as:
> Xij = a+B1*D1j+b2*D2j+c1*T1j+c2*t2j+c3*t3j+d1*D1j*T1j+ d2*D1j*T2j+ d3*D1j*T3j+ d4*D2j*T1j+d5*D1j*T2j+d6*D2j*T3j
> Where T1j = 1 if Tj = 1, T2j = 1 if Tj = 2, etc. The parameters (a, b1, b2, c1, c2, c3, d1, d2, d3, d4, d5, d6) are estimated as above.

Consequently, Castle et al. use linear regression to compare the reference toxicity of a substance (toxicity of a chemical agent at an initial time) to toxicity as time progresses. Although this passage describes nominally a toxicological algorithm, the actual algorithm itself is not limited to toxicology. As stated in page 8, line 10-17:

> An aspect of the present invention is an analysis of the variance for each gene contrast analysis. In this gene contrast analysis, the response of a gene or set of genes is monitored upon exposure to a chemical. In one preferred embodiment, the response of a gene or set of genes to a chemical can be fitted into one of four patterns illustrated in Figures 1a, 1b, 1c, and 1d. In this preferred embodiment, upon classification into one of these four groups, an analysis is then performed which categorizes the gene contrast analysis as one of four summary scores…

Figure 1 of Castle et al. is interpreted to illustrate a) efficacy, b) toxicity, c) no effect, or d) plateau effect of the agent. The model of Castle et al. is used not only to determine agent toxicity, but also agent efficacy, by assigning the agent a classification such as that shown in Figure 1 of Castle et al. The reference value is interpreted to be the effect of the agent at an initial time on the set of genes while the actual value is interpreted to be the efficacy, toxicity, or classification of the agent at the final time examined. The effect on gene expression caused by the agent determines the classification of biological activity of the agent. The instant disclosure does not limit the relation between the reference and actual agents to possess a specific relationship in

time (i.e. the reference and actual samples are interpreted to occur at different times on the same tissue sample).

However, Castle et al. does not teach a magnitude of a measurable response.

The invention of Smith teaches antiproliferative agents associated with peroxisome proliferator activated receptors gamma1 and gamma2.

Specifically, the invention of Smith is directed to compounds and ligands that bind to PPAR gamma1 and gamma2 and which function as antiproliferative, antiviral and antitumor agents (i.e. the ligands that bind to PPAR affect the toxicities of the cells to which the PPAR are attached.) The administration of PPAR related drugs is described in column 4, lines 10-18 of Smith. The measurable response of PPAR gamma to actin in human tissue is plotted in Figure 5 of Smith illustrating the partial response to the combination of PPAR and actin.

Claim 8 is further limiting with the additional limitation that the measurable response is partial agonist activity with respect to a biological response, or with respect to a protein that mediates a biological response.

Claim 9 is further limiting with the additional limitation that the measurable response is partial agonist activity with respect to PPAR-gamma.

Again, Figure 5 of Smith illustrates the partial agonist activity of the combination of PPAR gamma and actin.

Claim 13 is further limiting wherein at least one member of the group consisting of the efficacy value of the agent, the toxicity value of the agent and the classifier value of the agent is calculated and measured from in vitro data and procedures.

Claim 14 is further limiting wherein at least two members of the group consisting of the efficacy value of the agent, the toxicity value of the agent and the classifier value of the agent are calculated and measured from in vitro data and procedures.

Claim 15 is further limiting wherein all of the members of the group consisting of the efficacy value of the agent, the toxicity value of the agent and the classifier value of the agent are calculated and measured from in vitro data and procedures.

Claim 16 is further limiting wherein the living cells are selected from the group consisting of heart cells, liver cells and adipocyte cells.

The analysis completed in Castle et al. is completed on a chip *in vitro* on rat liver cells to analyze gene expression related to disease. The purpose of the study of Castle et al. is to predict the effect of substances *in vivo* as a result of *in vitro* experimentation. Castle et al. use a plurality of different tissue samples in the Affymetrix gene chip to complete the analysis (there are a plurality of tissue samples or "j's" in the equations listed). Each tissue sample affects the linear regression analysis (i.e. calculations) of the equations cited above in Castle et al. Each tissue sample "j" is interpreted to be its own tissue type, wherein each tissue type affects one another in the computation of agent efficacy or toxicity.

Claims 18-23 are further limiting wherein the measurable response elicited by the agent is the ability to affect a biological processes listed in instant claim 1 in vivo and in vitro, and the biological response is related to diseases in mammals.

Claims 24-26 are further limiting wherein the measurable response elicited by the agent is the ability to affect a biological process in a first living tissue from among the three biological processes listed in instant claim 1 wherein the gene expression and protein expression values are calculated from a different type of tissue that the first living tissue.

While Castle et al. reveals all three types of classifications as discussed above, Smith measured the effect of actin on PPAR in several types of human tissue (i.e. see Figure 5). Additionally, Smith conducts experiments both in vitro (i.e. Figure 5) and in vivo (column 4, lines 10-20).

Claims 27 and 29 are both dependent from claim 1 with the further limitation of requiring gene and protein expression patterns.

Figures 5 and 6 of Smith illustrate gene and protein expression patterns.

Claim 28 is further limiting with the additional limitation that at least one member of the group consisting of the toxicity-related population of genes and the toxicity-related population of proteins yields at least one toxicity-related gene expression pattern, or toxicity-related protein expression pattern, in response to the agent, that correlates with the presence of at least one undesirable response caused by the agent in the living

thing, wherein the at least one toxicity-related gene expression pattern, or at least one toxicity-related protein expression pattern, appears before the undesirable biological response.

Claim 30 is further limiting with the additional limitations of comparing at least one of efficacy values to a scale of efficacy values, toxicity values to a scale of toxicity values, a classifier value to a scale of classifier values and using comparison results to determine possession of biological activity.

Claim 31 is further limiting with the additional limitations of comparing at least two of efficacy values to a scale of efficacy values, toxicity values to a scale of toxicity values, a classifier value to a scale of classifier values and using comparison results to determine possession of biological activity.

Claim 32 is further limiting with the additional limitations of comparing efficacy values to a scale of efficacy values, toxicity values to a scale of toxicity values, a classifier value to a scale of classifier values and using comparison results to determine possession of biological activity.

Castle et al. use linear regression to compare the reference toxicity of a substance (toxicity of a chemical agent at an initial time) to toxicity as time progresses. Although this passage describes nominally a toxicological algorithm, the actual algorithm itself is not limited to toxicology. As stated in page 8, line 10-17:

> An aspect of the present invention is an analysis of the variance for each gene contrast analysis. In this gene contrast analysis, the response of a gene or set of genes is monitored upon exposure to a chemical. In one preferred embodiment, the response of a gene or set of genes to a chemical can be fitted into one of four patterns illustrated in Figures 1a, 1b, 1c, and 1d. In this preferred embodiment, upon classification into one of these four groups, an analysis is then performed which categorizes the gene contrast analysis as one of four summary scores…

Figure 1 of Castle et al. is interpreted to illustrate a) efficacy, b) toxicity, c) no effect, or d) plateau effect of the agent. The model of Castle et al. is used not only to determine agent toxicity, but also agent efficacy, by assigning the agent a classification such as that shown in Figure 1 of Castle et al. The scaling value is interpreted to be the effect of the agent at an initial time on the set of genes while the actual value is interpreted to be the efficacy, toxicity, or classification of the agent at the final time examined. The effect on gene expression caused by the agent determines the classification of biological activity of the agent. The instant disclosure does not limit the relation between the reference and actual agents to possess a specific relationship in time (i.e. the reference and actual samples are interpreted to occur at different times on the same tissue sample).

Claim 68 is drawn to a method for determining whether an agent possesses agonist activity with respect to a defined biological response, or with respect to a protein that mediates a defined biological response, comprising the steps of:
-- obtaining an expression measurement of at least one gene population or at least one protein population in living cells contacted with an agent and generating an efficacy value of the agent and a toxicity value of the agent:
-- comparing the efficacy value of the agent to at least one reference efficacy value to yield an efficacy comparison result, wherein each efficacy value represents at least one expression pattern of the same efficacy-related population of genes, or at least one expression pattern of the same efficacy-related population of proteins,

-- comparing the toxicity value of the agent to: a reference agonist value to yield a agonist toxicity comparison result and a reference partial agonist value, wherein each agonist toxicity value and partial agonist value represents at least one expression pattern of the same toxicity-related population of genes that distinguish between the agonist and the partial agonist, or at least one expression pattern of the same toxicity-related population of proteins, and

-- using the comparison results obtained above to select agents that possesses a desired degree of agonist activity with respect to biological response, or with respect to a protein that mediates a biological response.

Claim 69 is further limiting with the additional limitation that the biological response is partial agonist activity with respect to PPAR-gamma.

Claim 70 is further limiting with the additional limitation that the reference partial agonist toxicity value is generated using a reference PPAR-gamma partial agonist toxicity value.

The document of Castle et al., studies a method and system for predicting the biological activity, including toxicology and toxicity, of substances, as set forth above.

Castle et al. does not teach partial agonist activity with respect to a biological response, partial agonist activity with respect to PPAR-gamma, or a measurable response.

The invention of Smith teaches antiproliferative agents associated with peroxisome proliferator activated receptors gamma1 and gamma2.

It would have been obvious to someone of ordinary skill in the art at the time of the instant invention to modify the biological activity analysis of Castle et al. by use of the quantitative PPARgamma cell analysis of Smith wherein the motivation would have been that Smith allows for more quantitative profiling of PPARgamma activity to better assess the effects of agonists on cell proliferation relevant to acute diseases such as cancer in a way that gives a quantity or magnitude rather than a yes/no response (i.e. Castle et al.) of the severity of the disease of interest. [see, for example, abstract and Figure 5]. There would have been a reasonable expectation of combining the toxicity study of Castle et al. with the cell proliferation study of Smith because in addition to both studies relating to abnormalities in cells (i.e. toxicities in Castle et al. and abnormal proliferation in Smith), the general classification schemes of Castle et al. are applicable to the quantitative assessment of PPAR gamma in Smith to assess the presence of cancer.

Response to Arguments:

Applicant's arguments with respect the instantly rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Specifically, the alleged deficiencies of the prior 35 U.S.C. 102 rejection using Castle et al. are addressed by the addition of the reference of Smith.

The declaration under 37 CFR 1.132 filed 7 February 2008 is insufficient to overcome the rejection of the instant claims as set forth in the last Office action because: a new grounds of rejection has been applied based on alleged deficiencies.

Specifically, the limitations argued in the Tan declaration as not being taught by Castle are supplied by Smith.

35 U.S.C. 103 Rejection #2:

The following rejection is newly applied:

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castle et al. in view of Smith as applied to claims 1-4, 8, 9, 12-16, 18-27, 28-29, 30-32, and 68-70 above in further view of Monforte [US PGPUB 2002/0064788; issued 30 May 2002; filed 20 July 2001].

Claim 17 is further limiting wherein the living cells are 3T3L1 adipocyte cells.

Castle et al. and Smith make obvious a method for determining the magnitude of a measurable response elicited by an agent in living cells, as discussed above.

Castle et al. and Smith do not teach that the living cells are 3T3L1 adipocyte cells.

Monforte teaches methods for identifying new cellular compositions having desired activities, and methods for identifying organisms that are sensitive or resistant to drug composition.

Specifically, claim 20 of Monforte recites use of adipocyte cells to help a composition of cells reach its desired activity.

It would have been obvious to someone of ordinary skill in the art at the time of the instant invention to modify the toxicology assessment of Castle et al and Smith by use of the specific adipocyte cells of Monforte because it is obvious to try selecting

from a finite number of identified and predictable solutions. In this instance, 3T3L1 adipocytes are listed among the possible regulators of biological processes listed in claim 20 of Monforte; they are one of the listed species which it would be obvious to try in Castle et al. and Smith as the 3T3L1 cells are involved in analogous biological processes. There would have been reasonable expectation of success in combining the studies of Castle et al., Smith and Monforte because 3T3L1 adipocyte in Monforte is a species of cells applicable to the generic methods of Castle et al. and Smith.

Conclusion

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the central PTO Fax Center. The faxing of such pages must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The Central PTO Fax Center Number is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Negin, Ph.D., whose telephone number is (571) 272-1083. The examiner can normally be reached on Monday-Friday from 7am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Marjorie Moran, Supervisory Patent Examiner, can be reached at (571) 272-0720.

Information regarding the status of the application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information on the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RSN
27 April 2008

/Marjorie Moran/
Supervisory Patent Examiner, Art Unit 1631